

CLAIMS

What is claimed is:

1. A method comprising:
2. receiving a signal by a wireless electronic device;
3. measuring a level of effective isotropic radiated power associated with the
4. signal;
5. determining whether a conversion table within the wireless electronic device
6. includes an entry containing the measured power level, the conversion table including
7. (i) a first plurality of entries associated with measured power levels and (ii) a second
8. plurality of entries, corresponding to the first plurality of entries, each associated with a
9. suggested power level; and
10. adjusting the measured power level to a corresponding suggested power level if
11. the measured power level is contained in an entry of the conversion table.

1. 2. The method of claim 1, wherein no adjustment of the measured power
2. level is needed if the corresponding suggested power level is equal to the measured
3. power level.

1. 3. The method of claim 1, wherein the wireless electronic device is an
2. access point.

1. 4. The method of claim 1, wherein the adjusting of the measured power
2. level is performed in accordance with a logarithmic function.

1. 5. A method comprising:
2. producing a control setting displayed on a monitor associated with an access
3. point operating in accordance with Institute of Electrical and Electronics Engineers
4. (IEEE) 802.11; and
5. adjusting a coverage distance for the access point through adjustment of a
6. power level of signals transmitted from the access point.

1. 6. A method comprising:

I. 1 - 5, 18
II. 6 - 12
III. 13 - 15

2 transmitting a signal having a first level of effective isotropic radiated power by
3 a first wireless electronic device;

4 reducing a level of effective isotropic radiated power to a second level of
5 effective isotropic radiated power if a response to the signal is received by the first
6 wireless electronic device within a predetermined period of time.

1 7. The method of claim 6 further comprising:

2 increasing a level of effective isotropic radiated power to a third level of
3 effective isotropic radiated power if no response to the signal is received by the first
4 wireless electronic device within the predetermined period of time.

1 8. The method of claim 7, wherein the third level of effective isotropic
2 radiated power is greater than the second level and less than the first level.

1 9. The method of claim 7, wherein the increase of the level of effective
2 isotropic radiated power is performed in accordance with a logarithmic function.

1 10. The method of claim 6, wherein the first wireless electronic device is an
2 access point.

1 11. The method of claim 6 further comprising:
2 increasing a level of effective isotropic radiated power to a third level of
3 effective isotropic radiated power if no response to the signal is received by the first
4 wireless electronic device within the predetermined period of time and after a
5 predetermined number of retries.

1 12. The method of claim 7, wherein a rate of change from the first level of
2 effective isotropic radiated power to the second level of effective isotropic radiated
3 power is greater than a rate of change from the second level of effective isotropic
4 radiated power to the third level of effective isotropic radiated power.

1 13. A method comprising:

2 monitoring a level of effective isotropic radiated power associated with at least
3 one beacon produced by a first wireless electronic device on a first communication
4 channel; and

5 reducing the level of effective isotropic radiated power of the beacon if the level
6 is greater than a predetermined power level threshold.

1 14. The method of claim 13, wherein the beacon is a delivery traffic
2 indication message.

1 15. The method of claim 13, wherein the monitoring of the level of effective
2 isotropic radiated power further includes monitoring at least one beacon produced by
3 the first wireless electronic device on a communication channel adjacent to the first
4 communication channel.

1 16. A wireless electronic device comprising:
2 logic to measuring a level of effective isotropic radiated power associated with
3 the signal;

4 logic to analysis entries of a conversion table within the wireless electronic
5 device to determine whether one of the entries contains a value equivalent to the
6 measured power level, the conversion table including (i) a first plurality of entries
7 associated with measured power levels and (ii) a second plurality of entries,
8 corresponding to the first plurality of entries, each associated with a suggested power
9 level; and

10 logic to adjust the measured power level to a corresponding suggested power
11 level if the measured power level is contained in an entry of the conversion table